

REMARKS

In an Office Action dated May 21, 2009, claims 32, 34-40, 48, 52-58, and 63-68 were rejected. Herein, claims 32, 34-40, 48, 52-58, 64, and 66-68 have been amended, claims 63 and 65 have been cancelled, and new claims 69-76 have been added. No new matter has been added. Applicants respectfully request further examination and reconsideration of the present application.

Minor amendments to the specification have been made to correct grammatical and idiomatic errors. No new matter has been added.

The drawings were objected to because the Examiner believes that Figures 13A-13F and 14A-14F should be designated by a legend such as --Prior Art--. Replacement figures for Figures 13A-13F and 14A-14F have been provided labeling them as "PRIOR ART." Applicants respectfully request that the objection to the drawings be withdrawn in light of the replacement figures.

Claims 32, 48, and 67 were objected to for informalities. Claims 32, 48, and 67 have been amended in view of the Examiner's suggested claim language. Applicants respectfully request the objection to claims 32, 48, and 67 be withdrawn in light of the amendments to the claims.

Claims 32, 34-40, 63, and 64 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention. Claims 32, 34-40, and 64 are pending, and claim 63 has been cancelled. Specifically, the Examiner asserts that regarding claim 32, the limitations of "coding to be-recorded data", "shifting the position of the second pulse," and "directing said recording pulse" are vague and indefinite as the claim does not contain any structure to support these functional limitations. Applicants note that claims 32, 34-40, and 64 are directed to an optical recording **method**. Applicants note there is no requirement under 35 U.S.C. 112, second paragraph, that every limitation of a method claim define structure for performing the claimed

steps (*See* MPEP §§2171-2174). Applicants submit that the scope of the subject matter of claims 32, 34-40, and 64 can be determined by one having ordinary skill in the art and, therefore, a rejection of the claims under 35 U.S.C. 112, second paragraph, is not appropriate (*See* MPEP 706.03(d)). As such, Applicants respectfully request that the rejection of claims 32, 34-40, and 64 under 35 U.S.C. 112, second paragraph, be withdrawn.

Claims 32, 34-40, 48, 52-58, and 63-68 were rejected under 35 U.S.C. 102(b) as being anticipated by Tanaka et al. (U.S. Patent No. 6,426,930, hereafter “Tanaka”). Claims 32, 34-40, 48, 52-58, 64, and 66-68 are pending, and claims 63 and 65 have been cancelled. Applicants respectfully request reconsideration of the rejection based on the remarks below.

Claim 32 recites, in part, classifying each of the marks within coded data on the basis of its mark length and a space length of a preceding space or a succeeding space. Applicants respectfully submit that these features of claim 32 are not disclosed or suggested by Tanaka.

Regarding Tanaka, Applicants note that this reference discloses an information recording device having a recording compensation controlling unit 1 and an automatic laser power controlling unit (“APC”) 3 (*See* FIG.8). As explained in Tanaka, the recording compensation controller instructs the APC whether or not to adjust a pulse start timing or a pulse termination timing via a timing adjustment signal (Col. 8, Lines 19-24). Tanaka discloses that when data to be recorded is inputted, a **combination of a space length and a mark length of the data to be recorded is first recognized** (Col. 10, Lines 2-10). The timing adjustment signal controls the pulses of laser light to form the marks and spaces based on the recognized **combination** of the space length and the mark length of the data to be recorded (Fig. 11; Col. 10, Line 11 – Col. 11, Line 14).

Contrast the above method disclosed in Tanaka to the feature of claim 32 in which **each of the marks** within coded data are classified on the basis of its mark length and a space length of a preceding space or a succeeding space. In view of the foregoing, Applicants respectfully submit that Tanaka fails to disclose or classifying each of the marks within coded data on the

basis of its mark length and a space length of a preceding space or a succeeding space, as recited in claim 32.

Additionally, claim 32 recites, in part, shifting a position of a second pulse edge counted from a starting edge of a recording pulse train for forming marks and spaces, depending on the result of the classifying, to adjust the recording pulse train. Applicants respectfully submit that this feature of claim 32 is not disclosed or suggested by Tanaka.

In particular, as noted above, Tanaka discloses using a timing adjustment signal for controlling the pulses of laser light to form marks and spaces based on a recognized combination of the space length and the mark length of the data to be recorded (Fig. 11). However, only the **first pulse** of the laser light is advanced and/or the **last pulse** of laser light is delayed in the controlling of the pulses of laser light (Fig.11 steps S13, S15, or S17). In Figure 12 of Tanaka, the recording pulse train for the 3T record mark illustrates a shift in the **last pulse** of the recording pulse train. Similarly, in Figure 13 of Tanaka, the recording pulse train for the nT record mark illustrates a shift of the **first pulse** of the recording pulse train.

Contrast the above method disclosed in Tanaka to the feature of claim 32 in which a position of a **second** pulse edge counted from a starting edge of a recording pulse train for forming marks and spaces, depending on the result of the classifying, to adjust the recording pulse train. In view of the foregoing, Applicants respectfully submit that Tanaka fails to disclose or suggest shifting a position of a **second** pulse edge counted from a starting edge of a recording pulse train for forming marks and spaces, depending on the result of the classifying, to adjust the recording pulse train.

Based on the above remarks, Applicants respectfully submit that claim 32 is patentable over Tanaka.

Further, dependent claims 34-40, and 64 are patentable over Tanaka based at least on their dependency from claim 32.

Regarding claim 48, Applicants note that claim 48 recites, in part, a classifying unit operable to classify each of the marks within coded data on the basis of its mark length and a space length of a preceding space or a succeeding space, and a recording waveform generator operable to create a recording pulse train for creating marks and spaces in which a position of a second pulse edge counted from a starting edge of the recording pulse train is shifted depending on a result of the classification performed by the classifying unit. For at least similar reasons as discussed above with respect to claim 32, Applicants respectfully submit that claim 48 is patentable over Tanaka.

Further, claims 52-58, and 66 are patentable over Tanaka based at least on their dependency from claim 48.

Regarding claim 67, Applicants note that claim 67 recites, in part, classifying each of the marks within coded data on the basis of its mark length and a space length of a preceding space or a succeeding space, and shifting a position of a second pulse edge counted from a starting edge of the recording pulse train for forming the marks and the spaces, depending on a result of the classifying, to adjust the recording pulse train. For at least similar reasons as discussed above with respect to claim 32, Applicants respectfully submit that claim 67 is patentable over Tanaka.

Further, claim 68 is patentable over Tanaka based at least on its dependency from claim 67.

Regarding new claims 69-76, Applicants note that claims 69-72 and 73-76 depend from claims 32 and 48, respectfully. Therefore, Applicants respectfully submit that claims 69-72 and 73-76 are patentable over Tanaka based at least on their dependency from claims 32 and 48, respectfully.

Therefore, for at least the reasons presented above, Applicants respectfully submit that independent claims 32, 48, and 67, as well as the claims depending therefore, are clearly allowable over the prior art of record.

In view of the foregoing amendments and remarks, Applicants respectfully submit that the present application is clearly in condition for allowance. An early notice thereof is earnestly solicited.

If, after reviewing this Amendment, the Examiner feels there are any issues remaining which must be resolved before the application can be passed to issue, Applicants respectfully request that the Examiner contact the undersigned by telephone in order to resolve such issues.

Respectfully submitted,

Atsushi NAKAMURA et al.

/Stephen W. Kopchik/

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By _____
Stephen W. Kopchik
Registration No. 61,215
Attorney for Applicants

SWK/KWF/lkd
Washington, D.C. 20005-1503
Telephone (202) 721-8200
Facsimile (202) 721-8250
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